



# **Managing Projects in an Environment of Changing Business Practices**

**February 6, 2007  
2007 PM Challenge  
Track: Down to Business  
11:00 – 12:00**

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# Agenda

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## ❑ Business Process Changes

- ❖ New Agency Acquisition Strategy
- ❖ Program Planning and Budget Execution (PPBE)
- ❖ Funds Distribution
- ❖ Inter-Center Transfers
- ❖ Full Cost Simplification
- ❖ Cost Accrual Process
- ❖ Tracking Property, Plant and Equipment

## ❑ Hot Topics

- ❖ WBS Structures
- ❖ EVM

# Purpose of New Strategic Acquisition Approach

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- ❑ Strengthen, standardize, and formalize the process for developing key program/project strategies
- ❑ Ensure that Mission Directorates and sponsors of key institutional buys vet strategic decisions on new starts early-on through an integrated senior-level leadership forum
- ❑ Better integrate the acquisition process with the strategic planning and budgeting process, so that considerations such as the Agency commitment to “Ten Healthy Centers” are part of the decision set
- ❑ Complement current program management, acquisition management and strategic planning processes
- ❑ Address GAO High-Risk designation and current Internal Control Weakness in the Acquisition Management arena
- ❑ Goal is to smoothly integrate this process into the current program/project management flow



# Changes from Current Process

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## □ New meetings

- ❖ Acquisition Strategy Planning Meeting (ASP)
  - Aligns decision with the budget cycle
  - Generates approval for a new program or major project, triggered by new or changed Agency requirements or legislative direction
  
- ❖ Acquisition Strategy Meeting (ASM)
  - Validates that program level acquisition strategy can be supported by budget, schedule and manpower
  - Ensures that first order program planning is in place (WBS, budget, risk assessment, schedule, etc.)
  - Validates make/buy rationale and any partnership decisions

## □ Existing meeting

- ❖ Procurement Strategy Meeting (PSM)
  - Identical to old ASM meeting
  - Ensures that specific acquisitions are ready to proceed
  - Focus is on procurement process, not strategic planning.

# Generic Acquisition Strategy Policy Framework



## Acquisition Planning

### Acquisition Strategic Planning (ASP)

- Is decision required (re-address next year)?
- Who is the Applicable MD?
- Which Host Center?
- Delegate to Center?
- Which Partners?
- Is an ASM required?
- When should the ASM occur?

#### Members:

- A suite
- AA for Procurement
- OGC
- OCFO
- Others as needed...

#### Scope:

- Aligns with Agency Strategic Plan
- 2 year Agency acquisition outlook
- 10 Healthy Centers
  - Workforce
  - Facilities

#### When:

- Annual (aligned with PPBES)

#### Note:

- May not need ASP for existing routine Agency business (e.g. Explorer AO)
- May not need all three meetings (e.g. Skip the ASM for Joint Base Operations Support Contract)

## Acquisition Execution

### Acquisition Strategy Meeting (ASM)

- Needs identified
- MD Proposes Strategy
- Make/Buy
- Center Assignments
- Targeted Partners
- Projected Schedule
- Projected Budget
- Risk

#### Members:

- AA
- PA&E
- OCE
- AA for Procurement
- OGC
- OCFO
- Ex-officio (A, DA)
- Appropriate MD/MSO
- Appropriate CD (s)

#### Scope:

- Acquisitions
  - Budget
  - Schedule
  - Requirements status
  - Risk

#### When:

- Prior to partnership commitments

### Procurement Strategy Meeting (PSM) (Old ASM)

- Acquisition Background and Objectives
- Risk Analysis
- Cost Estimate
- Acquisition Approach (includes competition, small business goals, government furnished property)
- Schedule

#### Members:

- AA for Procurement
- OGC
- OCFO
- OCE
- PA&E
- Appropriate MD
- Appropriate MSO
- Appropriate Center project and procurement personnel

#### Scope:

- Individual Acquisition Procurement Strategy in accordance with Federal Acquisition Regulation (FAR) and NASA FAR Supplement

#### When:

- Prior to development of solicitation

# Planning, Programming and Budget Execution (PPBE): A Comparison to the POP

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**PPBE is a process used by agencies to convert strategies and priorities into programs and budgets. PPBE is part of the continuing evolution within NASA to enhance our analytic-based decision-making process.**

## **Similarities**

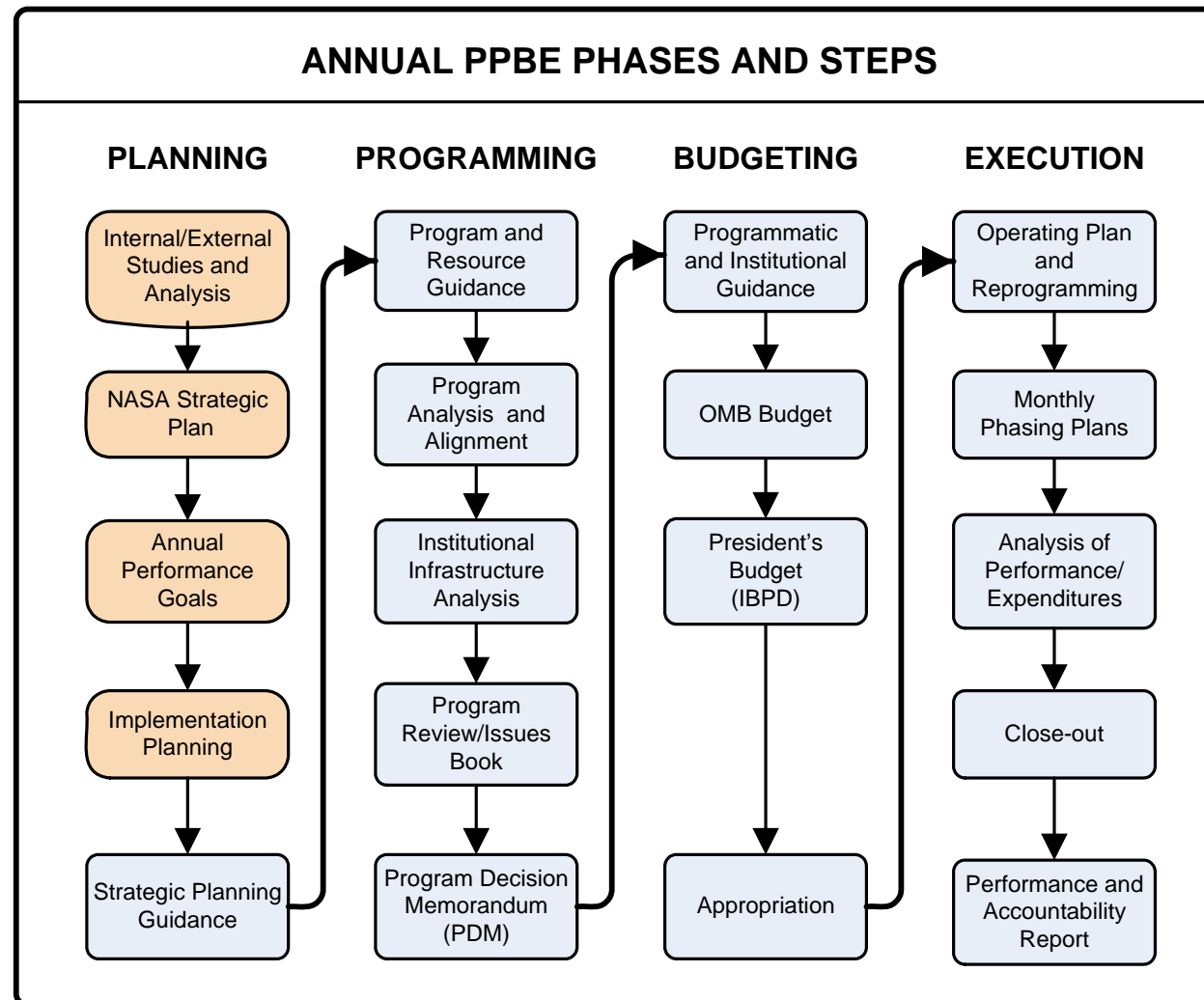
- ☐ Both processes start with strategic planning
- ☐ Both processes meet all OMB and Congressional budget submission and budgetary reporting requirements

## **Differences**

- ☐ Focuses on programs first and then institutions and infrastructure, raising visibility of key decisions
- ☐ Provides rigorous analysis of the strategic impact of programs to answer the question “will the programs we are proposing help NASA achieve its strategic goals
- ☐ Focusing on simplified financial data (total program or project) until strategic decisions are completed



## PPBE Phases/Steps





## Funds Distribution: What it means to you

Process	Prior to FY 07	Now
Funds Distribution	29-85 working days	14 – 32 working days
Inter-Center Transfers	25 working days (average)	1 working day

- ☐ Eliminated Central Resources Control System (CRCS) and associated dual entries
  - CRCS and CRCS-1 will continue to be used for PY2006 and prior years. The 506A will be used as the official documentation that will give Centers budget approval
- ☐ Eliminated “Green” process and other manual signatures
  - Budget Allocation occurs at the Theme level- funds are pushed down to the Missions. OCFO forwards the full amount that has been allocated to the Missions
- ☐ Established Metrics and accountability
- ☐ Standardized terminology: Agency Operating Plan (AOP); Agency Execution Plan (AEP)

Reducing the time it takes to secure funds from OMB and then distribute it to performing organizations is critical to the effective achievement of NASA's Strategic Goals



# Budget Process-From President's Budget to Funds Distribution

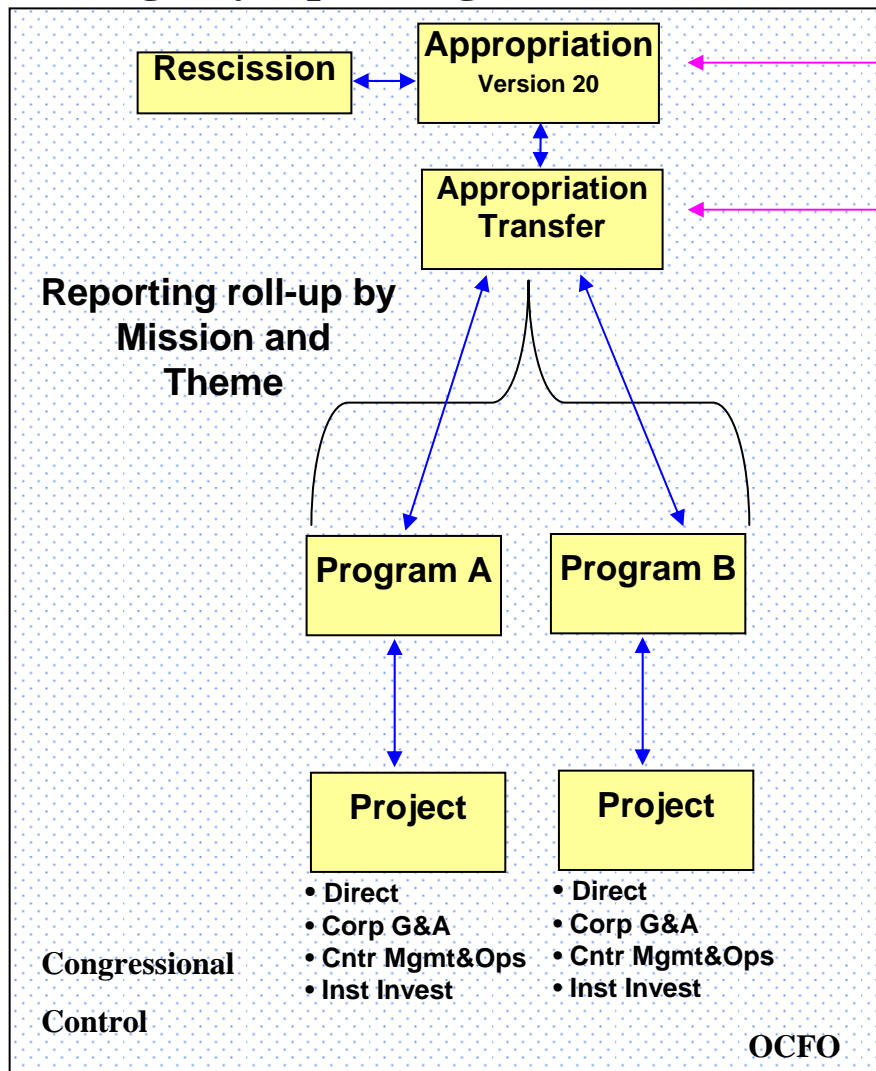


	<b>Congressional Operating Plan (COP)</b>	<b>Agency Operating Plan (AOP)</b>	<b>Agency Execution Plan (AEP)</b>
<b>Audience</b>	External	Internal	Internal
<b>Scope</b>	Represents the intended application of funds to be appropriated	Budget Plan to guide Agency operations – contains control amounts for all programs	Establishes the planning control amounts at Theme, Program, and Project Levels for Funds Distribution
<b>Level of Detail</b>	All Programs, Projects > \$250M, and special interest projects	Provides the aggregated full cost project amount (includes Corporate G&A, Institutional Investment, Center M&O)	Control totals for all projects Includes split between programmatic and institutional and distribution at Project by Center level

# AOP Controls

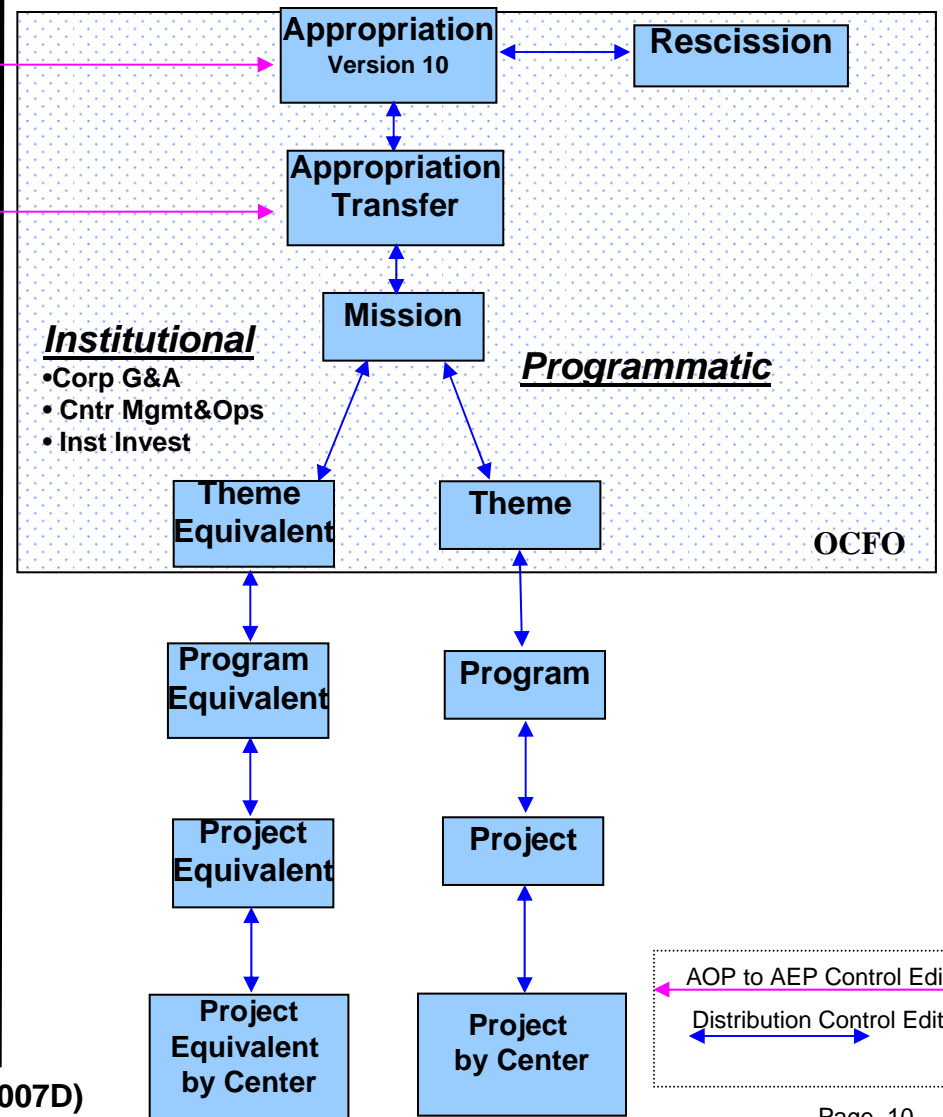


## Agency Operating Plan (Total NOA)



ALL PLANS BY FUND (e.g. ESAX22007D, ESAX32007D)

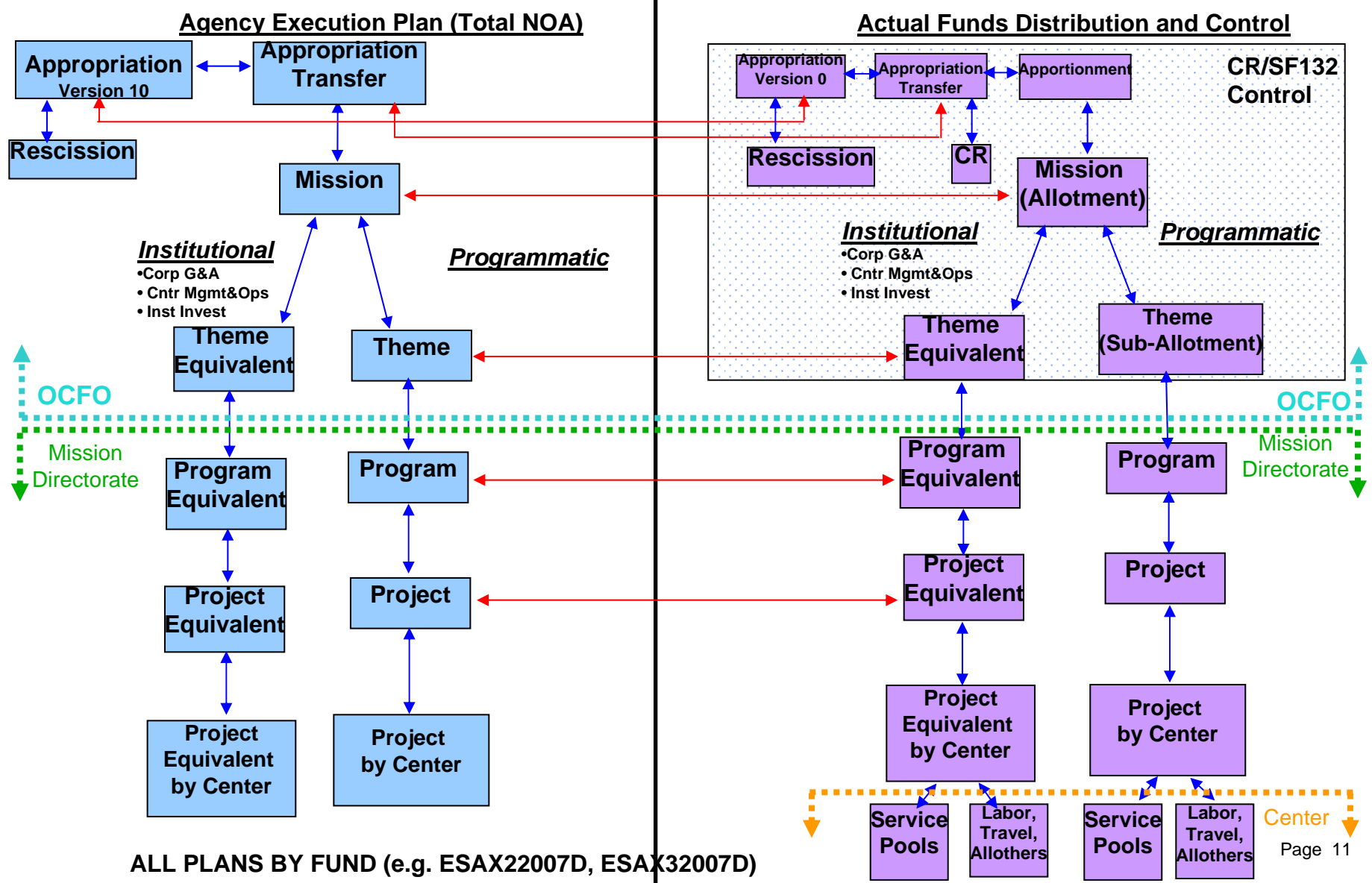
## Agency Execution Plan (Total NOA)





# AEP Controls

AEP to Funds Control Edit  
Distribution Control Edit





# High Level Steps: Inter-Center Funds Transfers

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1. Negotiate between Centers the details of the transfer – amount, scope of work, etc.
  - Notify applicable mission/institutional office of intent
2. The Requesting and Performing Centers Project Offices determine whether a new WBS code is required to track the costs related to the transferred work
3. Sending Center project manager contacts their Center CFO and notifies them of the details of the transfer:
  - Brief description of why the funds are being transferred
  - Any significant deliverable dates
  - Name of project POC at receiving center
  - Name of budget contact at receiving center
  - Name of project POC at issuing center
  - Budget contact at issuing center
4. Funds are transferred in SAP by Requesting Center CFO office
  - Process is intended to take care of unforeseen situations – not as a substitute for re-guidelining when necessary
  - Validation/reconciliation process will be evaluated at 6 month increments



## Full Cost Simplification - FY2007

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- ❑ New Center Management & Operations (CM&O) Account
  - ❖ Consolidated Center General & Administrative (G&A), Facility & Related Services (F&RS), Information Technology (IT), Safety & Mission Assurance (SM&A), and new Technical Excellence
- ❑ Funded “off-the-top” and treated as separate program account
- ❑ Allocated back to projects from the Agency level at the end of the external budget process
- ❑ Will operate as fixed, controlled account
- ❑ Center Directors serve as CM&O Control Account Managers (CAM)
- ❑ Associate Administrator serves as Integrated CM&O CAM
- ❑ Future service pool “elimination” may impact CM&O budget content/level



# Contractor Cost Report (533) Process Changes

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- ❑ Process changes effective for FY 2007 include
  - ❖ Greater clarity and clearer representation of cost information (actuals and estimates) reported in SAP from the 533s
  - ❖ Better process for
    - Recording adjustments of prior month estimates
    - Aligning cost and obligations at the line item level
  - ❖ Cost reports modified to include columns for estimated and actual cost
- ❑ The changes to the 533 process will impact the financial and resource personnel that support program and project managers
- ❑ Project Managers should ensure contracts include data reporting requirements by WBS to a level necessary to assess performance and risk and to track Agency capitalized assets
- ❑ When EVM is required, Project Managers should ensure contracts include a requirement to reconcile 533 and CPR data



## Property, Plant and Equipment – improving accountability

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A capitalized asset is a product that is: greater than \$100K, has a useful life > 2 year, and has an alternative future use

Issues:

- ❑ Inability to track costs throughout the entire PP&E lifecycle
  - ❖ Capitalized acquisitions are not identified from inception of the project within the Contract or Procurement documents
  - ❖ Increased level of communication between OCFO and Procurement needed to ensure capital asset information exchange
- ❑ Insufficient contractor reporting
  - ❖ Inability to validate costs reported by contractors
  - ❖ Inability to have contractor to report in the same structure that is used by the Cost Analysts
  - ❖ No standardized Reporting Categories for Contractors to report against



## PP&E - Proposed Solutions

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- A new approach is being instituted to track capitalized assets from inception (PMs play a primary role)
  - ❖ 7120.5D requires PMs complete the Alternative Future Use Questionnaire:
    - PMs will partner with OCFO beginning in phase A to identify capital assets and ensure tracking from inception to disposal
  - ❖ Capital assets must be identified as discrete elements of the project's product oriented WBS
  - ❖ Contracts must be written or modified to ensure contractor provided capital assets are tracked
    - Ensure contractor monthly cost reports (using the NF 533) provide work-in-process (WIP) data on a monthly basis for each capital asset (report by WBS element)





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## Hot Topics



# WBS Structures – Considerations for a PM

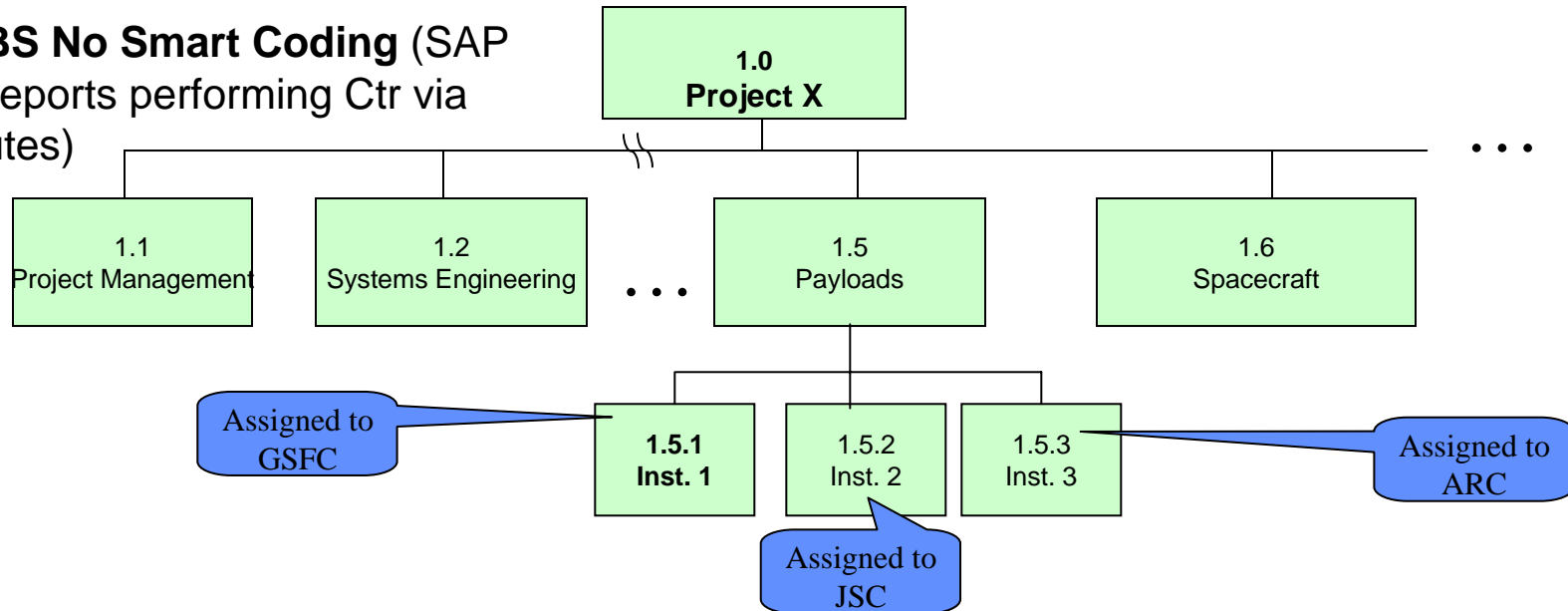
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- ❑ The technical WBS and financial WBS should be the same
  - ❖ 7120.5D requires use of a standard level 2 WBS for Flight Projects
- ❑ The Project Manager “owns” the WBS. He/she is responsible for generating the WBS that is used for both technical management, financial management, and CADRe cost management.
  - ❖ The EVM and CADRe WBS should be mapped to one level below the sub-system to support cost estimating
- ❑ Projects are expected to utilize EVM for risk and cost-risk management
- ❑ “Smart coding” (assigning manual numbers in the WBS to identify a performing organization) is not required to assess performance by organization – Avoid “smart coding”
- ❑ Establishing a WBS element at the lowest level to designate performing centers is still required by the IEM system – Manager’s may want to consider including a summary node if there is even potential for more than one performing center
- ❑ Agency NSM to AWACS cross-walks are in place – Projects can use BW to access AWACS data through current NSM codes to the project level

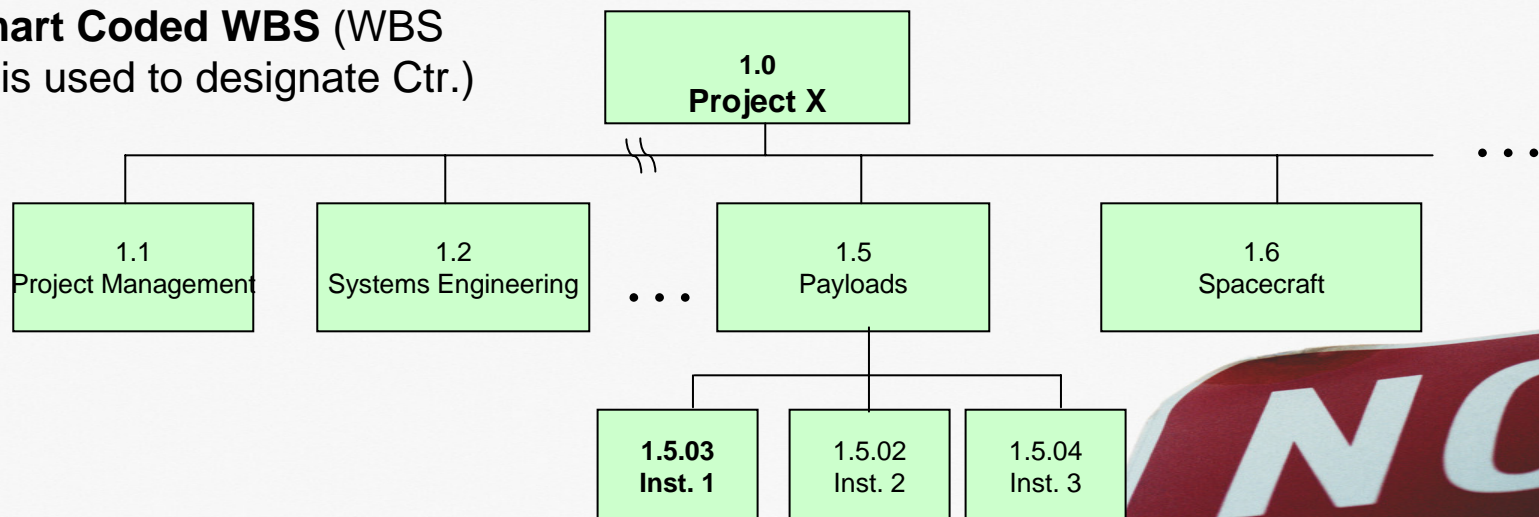


# Example of WBS Smart Coding

**Sample WBS No Smart Coding** (SAP tracks and reports performing Ctr via WBS attributes)



**Sample Smart Coded WBS** (WBS numbering is used to designate Ctr.)



Legend:

Let .01 = LaRC

Let .02 = JSC

Let .03 = GSFC

Let .04 = ARC





# Earned Value Management (EVM)

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EVM is a project management tool

- ❑ OMB requires ANSI/EIA-748 compliant EVM on all major acquisitions (all development projects)
  - ❖ NASA is moving towards full compliance
- ❑ 7120.5D requirements for in-house EVM:
  - ❖ Application of EVM principles on all projects > \$20M
  - ❖ Project baseline reviews prior to KDP-C
- ❑ 7120.5D and NFS requirements for contracted effort:
  - ❖ Application of ANSI/EIA-748 compliant EVM on all contracts > \$20M
  - ❖ Application of an ANSI/EIA-748 certified system for all contracts greater than \$50M
  - ❖ Integrated Baseline Reviews (IBRs) on all contracts requiring EVM



## Conclusion

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- ❑ NASA continues to improve Agency business process to support the NASA mission
  - ❖ Standardizing and integrating the strategic planning and budgeting process
  - ❖ Reducing the time it takes to distribute funds to performing organizations
  - ❖ Simplifying Full Cost through implementation of the Cost Center Management and Operations (CM&O) Account
  - ❖ Enabling Center-to-Center transfers for both Programmatic and Institutional Projects
  - ❖ More effective automated support for acquisition process
  - ❖ Improved contractor cost information available for program/project managers
- ❑ In order to leverage business system information for enhanced planning, assessment and decision making, project managers need to understand NASA's business systems, processes, and system upgrades.



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## Backup



## 7120.5D Project Categorization

Priority Level	LCC > \$1B, use of nuclear power source, or human space flight		
	LCC < \$250M	\$250M ≤ LCC ≤ \$1B	
High	Category 2	Category 2	Category 1
Medium	Category 3	Category 2	Category 1
Low	Category 3	Category 2	Category 1

Note: The threshold values in Table 2-1 are updated annually as part of the Agency's strategic planning guidance.